



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,958	08/04/2003	Hye Suk Chi	RPS920030032US1/2805P	5183
47052 7590 01/23/2008 SAWYER LAW GROUP LLP PO BOX 51418 PALO ALTO, CA 94303			EXAMINER FERGUSON SAMRETH, MARISSA LIANA	
			ART UNIT 2854	PAPER NUMBER
			NOTIFICATION DATE 01/23/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent@sawyerlawgroup.com  
nikia@sawyerlawgroup.com

## Office Action Summary

Application No.

10/633,958

Applicant(s)

CHI ET AL.

Examiner

Marissa L. Ferguson-Samreth

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a spring coupled to the frame and the bearing" in claims 1, 10, 20, 32 and 40 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

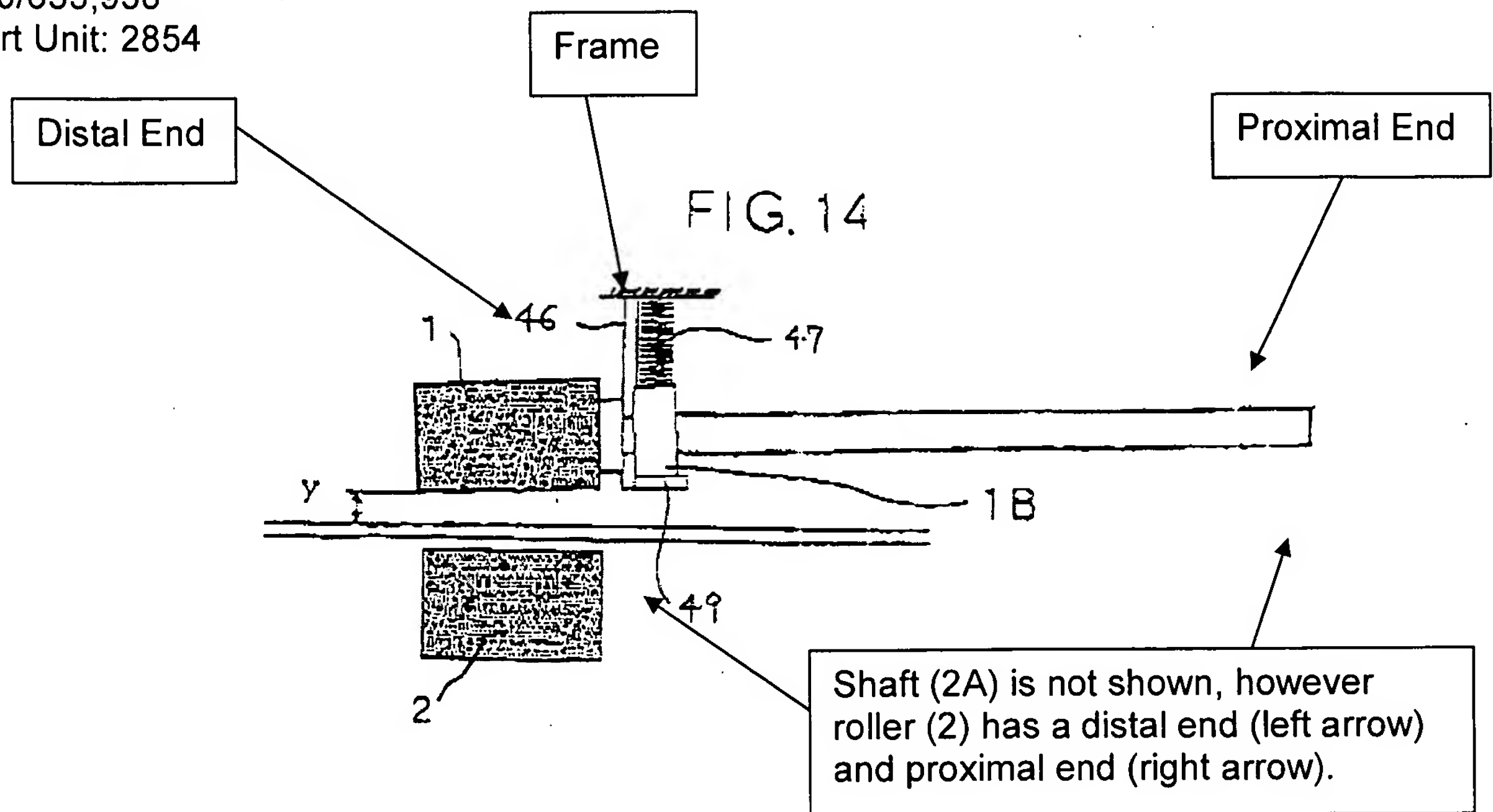
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 6, 7, 10, 11, 15, 16, 20, 21, 26, 27, 32, 35-37, 40, 41, 43-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Miki (US Patent 6,585,253).

Regarding claims 1, 10, 20, 32, 40, 41, Miki teaches a method and apparatus comprising a frame (10), at least one cantilevered roller shaft (1A) comprises a distal end and a proximal end (refer to figure on page 4 of the detailed action) for advancing a document (P1,P2), wherein the proximal end is coupled to the frame of such that the distal end floats [As for advancing a document, wherein the at least one cantilevered roller shaft is supported only at one end (Figures 12-14)], a bearing (1B) coupled to the at least one cantilevered roller shaft (Figures 12-14) and a spring (47) coupled to the frame (10 and Figure on page 4 of the detailed action) and the bearing (1B) such that the at least one cantilevered roller shaft is spring loaded against a drive roller shaft.



Regarding claims 3, 11 and 21, Miki teaches wherein a need for a rigid frame that directly supports the unsupported end is eliminated (Figures 12-14).

Regarding claims 6, 7, 15, 16, 26, 27, 35-37, 43-45 Miki teaches a method and apparatus comprising a second roller shaft (2A) coupled to the frame (10), a second roller shaft (2A) with a proximal and distal end that is cantilevered wherein a second unsupported end of the second cantilevered roller shaft floats (Figure 14), inserting the document in a document path of the printer until the document reaches the at least roller and the least one second roller, rotating the two rollers (Column 2, Lines 8-44) and removing the document from the path (note: it is apparent that the document is removed).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33, 34, 38, 39, 41, 42, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miki (US Patent 6,585,253) in view of Antinora (US 7,307,741).

Miki teaches the claimed invention with the exception of the method of inserting the document in the printer. Antinora teaches a method of automatically and/or manually inserting pre-printed sheets into feeding trays (Column 1, Lines 26-30, Column 5, Lines 42-47, Column 2, Lines 7-29, Columns 6, Claim 1, Lines 63-67 and Column 7, Claim 1, Lines 1-23).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Miki to include the step of inserting a document into the printer as taught by Antinora for the purpose of providing a feeding capability that is cost effective without the requirement of additional equipment.

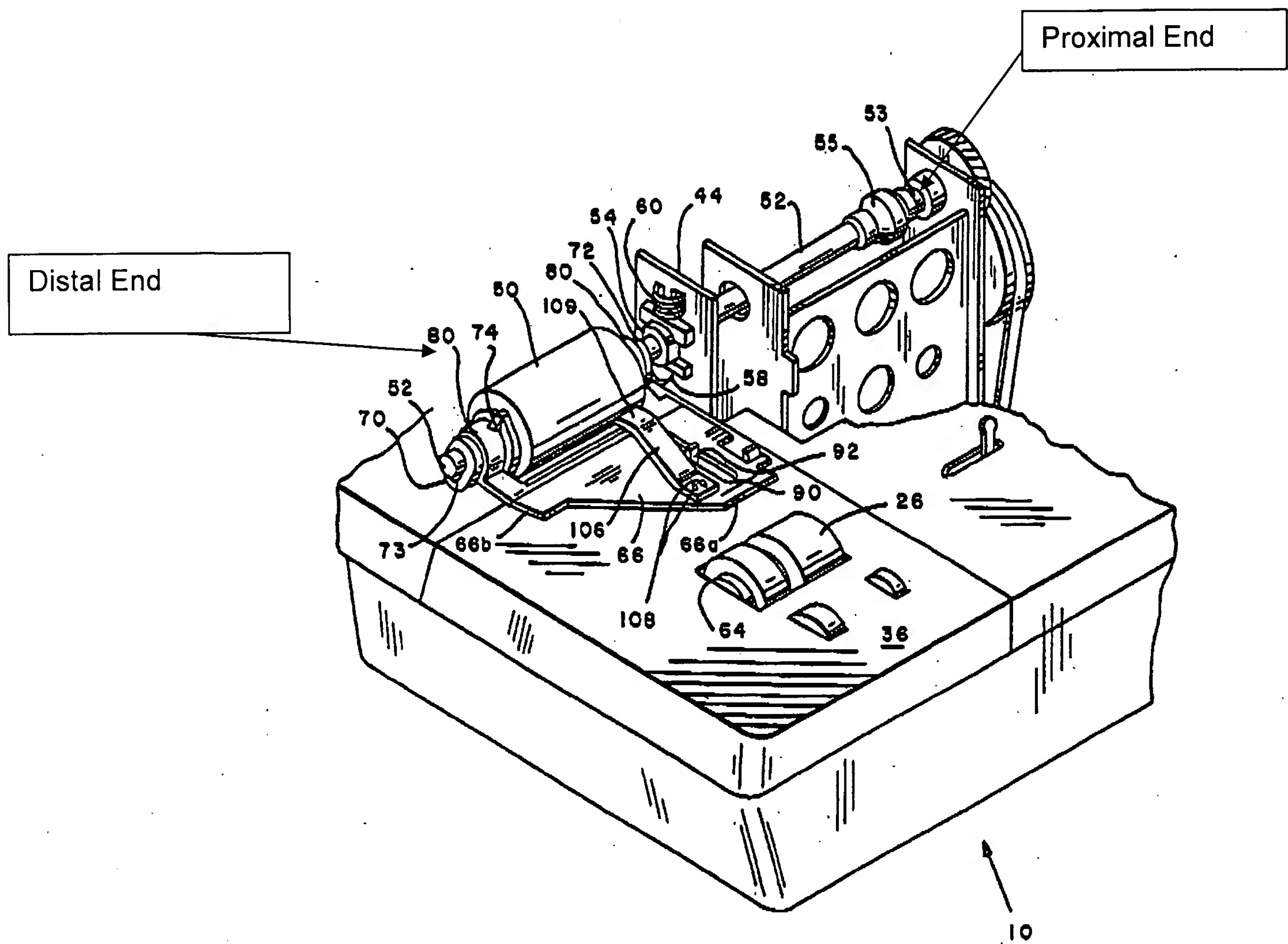
4. Claims 1-5, 9-15, 18-26, 29-32, 35-37, 40, 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miciukiewicz (US Patent 4,763,575) in view of Miki (US Patent 6,585,253).

Regarding claims 1,10,20,32 and 40, Miciukiewicz teaches a method and apparatus comprising a frame (10, 12), at least one cantilevered roller shaft (52) comprises a distal end and a proximal end (refer to figure on page 3) for advancing a document (18), wherein the proximal end is coupled to the frame of such that the distal end floats, wherein the at least one cantilevered roller shaft is supported only at one end (Figure 2), a bushing/bushings (70, 72) coupled to the at least one cantilevered roller shaft and a spring (106) . However, he does not explicitly disclose a spring coupled to the frame and the bearing such that the at least one cantilevered roller shaft is spring loaded against a drive roller shaft. Miki teaches a spring (47) coupled to the frame (10 and Figure on page 4 of the detailed action) and the bearing (1B) such that the at least one cantilevered roller shaft is spring loaded against a drive roller shaft.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Michiukiewicz to replace the spring and bearing thereof with a spring and bearing that couples to a frame and is spring loads as taught by Miki, since Miki prevents the paper sheet from skewing, folding or jamming in the path.

Regarding claim 2, 3, 11, 12, 21, 22, Miciukiewicz teaches a method and apparatus wherein a supported end of the at least one cantilevered roller shaft is supported at two support locations (44, 55) located outside a document path, wherein the document (18) can be appropriately fed and wherein the need for a rigid frame directly supports the unsupported end is eliminated (Figure 2).



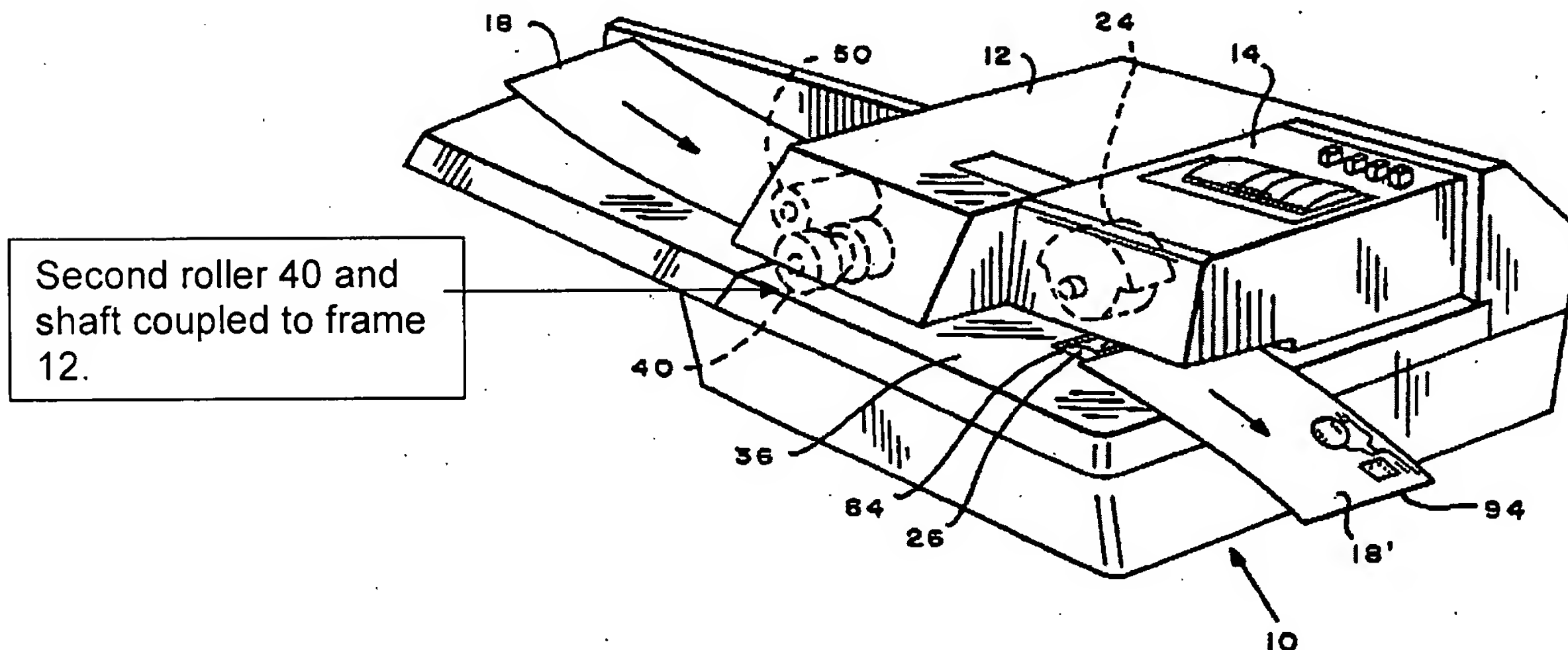


Regarding claims 4, 13 and 23, Miciukiewicz teaches a method and apparatus comprising wherein the frame further comprises a main portion (12) and front portion (10), and wherein the at least one cantilevered roller shaft (52) is coupled to the main portion such that the at least one cantilevered roller shaft does not rely on the front portion for support.

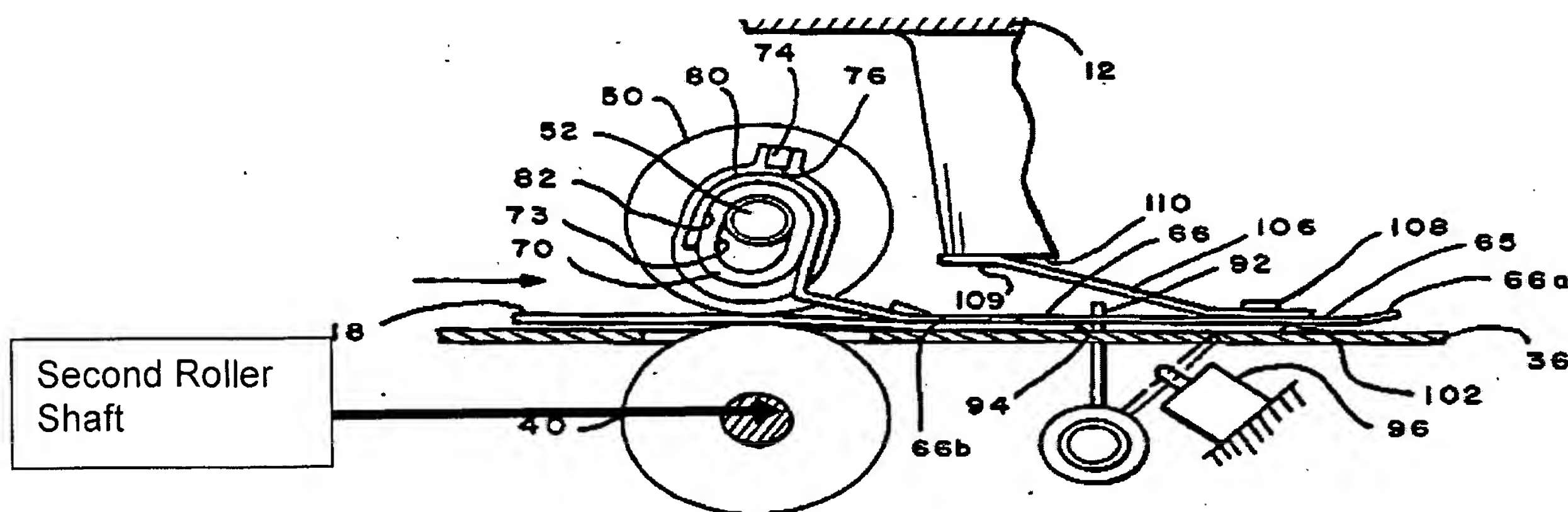
Regarding claims 5, 14 and 24, Miciukiewicz teaches a method and apparatus comprising wherein at least one gimbal roller (50) is coupled to the at least one cantilevered roller shaft (52).



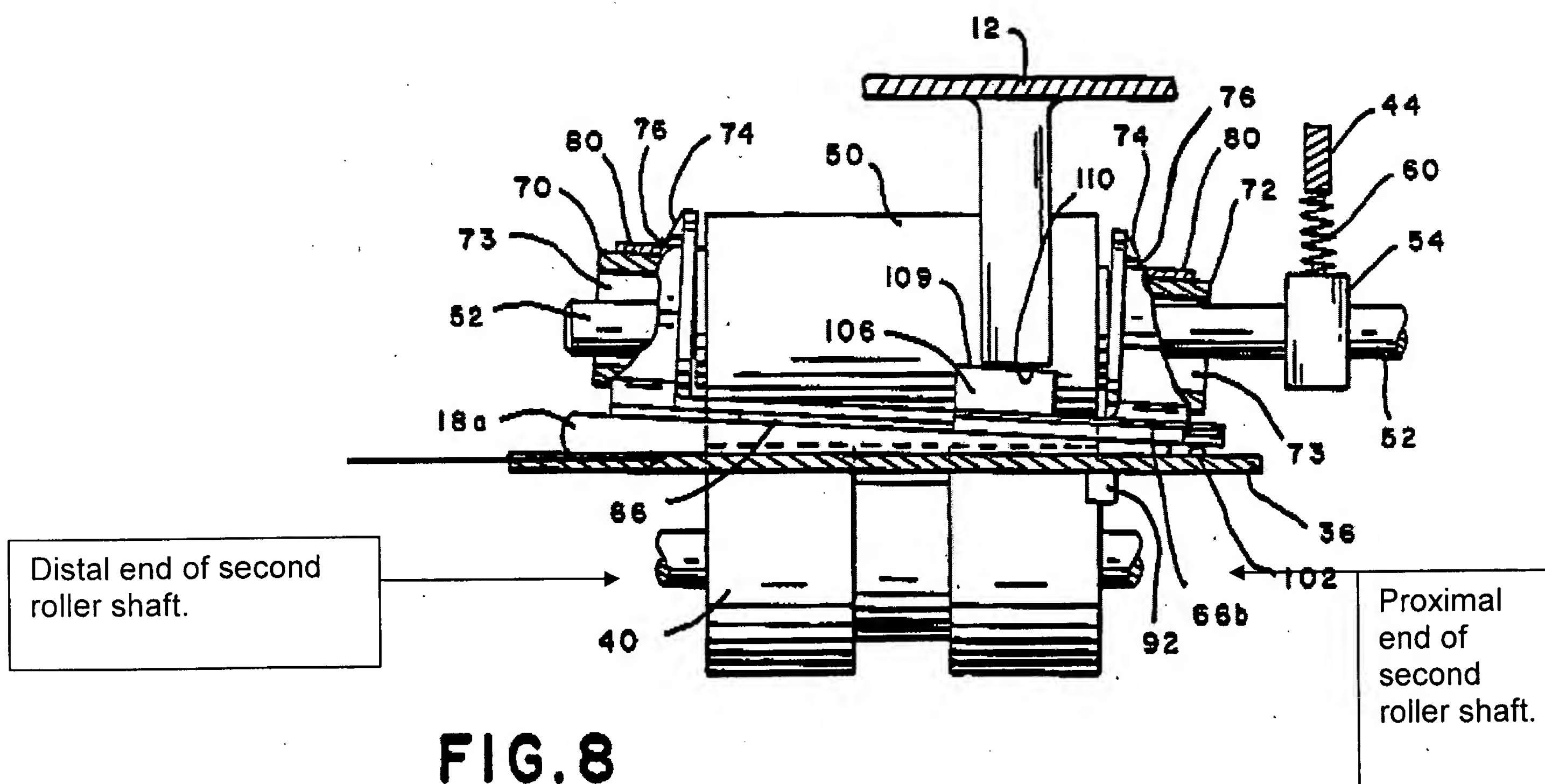
Regarding claim 15, 26, 35, 36,37 and 43, Miciukiewicz teaches a method and apparatus comprising, a second roller shaft coupled to the frame (refer to figure 4 on page 5 and figure 1 below) for advancing a document, a second roller shaft having a distal and proximal end (refer to figure 8 on page 5), wherein the distal end floats and wherein the document is removed from the path (note: this is an obvious feature).



**FIG. 1**



**FIG. 4**



**FIG. 8**

Regarding claims 9, 19 and 30, Miciukiewicz teaches a method and apparatus wherein at least one gimbal roller (40) is coupled to the second roller shaft.

Regarding claims 18, 29, 44 and 45, Miciukiewicz teaches a method and apparatus comprising wherein the frame further comprises a main portion (12) and front portion (10), and wherein the second roller shaft (refer to figure 1 on page 4 and figure 4 on page 5) is coupled to the main portion such that the second roller shaft does not rely on the front portion for support.

Regarding claims 25 and 31, Miciukiewicz teaches a method and apparatus comprising a drive device coupled to the frame, wherein the drive device rotates the at least one shaft to advance the document and wherein the drive device rotates the second roller shaft to advance the document (Column 3, Lines 34-61).

5. Claims 33, 34, 38, 39, 41, 42, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miciukiewicz (US Patent 4,763,575) in view of Miki (US Patent 6,585,253) as applied to claims 32, 40 and 43 above, and further in view of Antinora (US 7,307,741).

Miciukiewicz in view of Miki teaches the claimed invention with the exception of the method of inserting the document in the printer. Antinora teaches a method of automatically and/or manually inserting pre-printed sheets into feeding trays (Column 1, Lines 26-30, Column 5, Lines 42-47, Column 2, Lines 7-29, Columns 6, Claim 1, Lines 63-67 and Column 7, Claim 1, Lines 1-23).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify the invention as taught by Miki in view of Miki to include the step of inserting a document into the printer as taught by Antinora for

the purpose of providing a feeding capability that is cost effective without the requirement of additional equipment.

6. Claims 1-32, 35-37, 40 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guaraldi et al. (US 6,122,978) in view of Miki (US Patent 6,585,253).

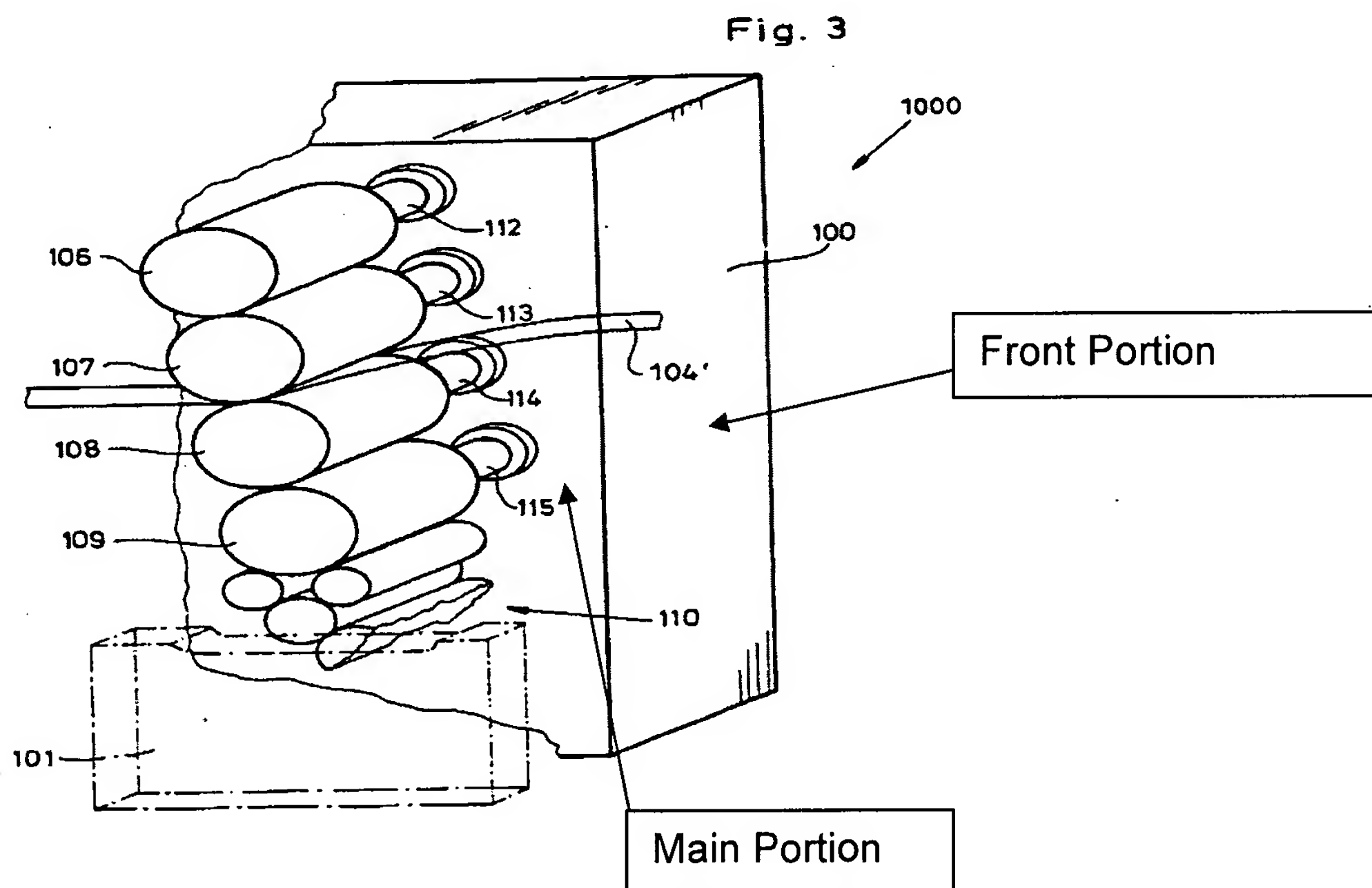
Regarding claims 1, 10, 20, 32 and 40, Guaraldi teaches an apparatus and method comprising a frame (100), at least one cantilevered roller shaft (113) comprises a distal end and a proximal end for advancing a document (104), wherein the proximal end is coupled to the frame of such that the distal end floats (As shown in Figure 3 and Column 6, Lines 14-36) and the at least one cantilevered roller shaft is supported only at one end (Figure 3) and a bearing (116). However, he does not explicitly disclose a spring coupled to the frame and the bearing such that the at least one cantilevered roller shaft is spring loaded against a drive roller shaft. Miki teaches a spring (47) coupled to the frame (10 and Figure on page 4 of the detailed action) and the bearing (1B) such that the at least one cantilevered roller shaft is spring loaded against a drive roller shaft.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Michiukiewicz to replace the spring and bearing thereof with a spring and bearing that couples to a frame and is spring loads as taught by Miki, since Miki prevents the paper sheet from skewing, folding or jamming in the path.

Regarding claims 2, 3, 11, 12, 21, 22, Guaraldi teaches a method and apparatus wherein a supported end of the at least one cantilevered roller shaft (113) is supported at two support locations (100, 11) located outside a document path, wherein the

document can be appropriately fed (Figure 3 and Figure 6a) and wherein the need for a rigid frame directly supports the unsupported end is eliminated (Figure 3 and 6a).

Regarding claims 4, 13, 23, Guaraldi teaches a method and apparatus wherein a frame (100) further comprises a main portion and front portion (refer to figure 3 below), and wherein the at least one cantilevered roller shaft (113) is coupled to the main portion such that the at least one cantilevered roller shaft does not rely on the front portion for support (Figure 3).



Regarding claims 5, 14 and 24, Guaraldi teaches a method and apparatus comprising wherein at least one gimbal roller (107) is coupled to the at least one cantilevered roller shaft (113).

Regarding claims 6-8, 15-17, 26-28, 35-37 and 43, Guaraldi teaches a method and apparatus comprising a second roller shaft (114) coupled to the frame, a second

roller shaft (114) is cantilevered wherein a second unsupported end of the second cantilevered roller shaft floats (Figures 3, 6a) and wherein a second supported end of the second roller shaft is supported two second support locations (100, 111) located outside a document path.

Regarding claims 9, 19 and 30, Guaraldi teaches a method and apparatus comprising wherein at least one gimbal roller (108) is coupled to the second roller shaft (114).

Regarding claims 18, 29, 44 and 45, Guaraldi teaches a method and apparatus comprising wherein a frame (100) further comprises a main portion and front portion (refer to figure 3 on page 3 of the office action), and wherein the second roller shaft (114) is coupled to the main portion such that the second roller shaft does not rely on the front portion for support (Figure 3).

Regarding claims 25 and 31, Guaraldi teaches a method and apparatus comprising a drive device (128) coupled to the frame, wherein the drive device rotates the at least one shaft to advance the document (Column 6, Lines 54-67) and a drive device (129) coupled to the frame, wherein the drive device rotates the second roller shaft to advance the document (Column 7, Lines 53-60).

7. Claims 33, 34, 38, 39, 41, 42, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guaraldi et al. (US 6,122,978) in view of Miki (US Patent 6,585,253) as applied to claims 32, 40 and 43 above, and further in view of Antinora (US 7,307,741).

Guaraldi et al. in view of Miki teaches the claimed invention with the exception of the method of inserting the document in the printer. Antinora teaches a method of automatically and/or manually inserting pre-printed sheets into feeding trays (Column 1, Lines 26-30, Column 5, Lines 42-47, Column 2, Lines 7-29, Columns 6, Claim 1, Lines 63-67 and Column 7, Claim 1, Lines 1-23).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to further modify the invention as taught by Guaraldi et al. in view of Miki to include the step of inserting a document into the printer as taught by Antinora for the purpose of providing a feeding capability that is cost effective without the requirement of additional equipment.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-47 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within



Application/Control Number:  
10/633,958  
Art Unit: 2854

Page 15

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L. Ferguson-Samreth whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel J. Colilla/  
Primary Examiner  
Art Unit 2854

Marissa L Ferguson-Samreth  
Examiner  
Art Unit 2854

MFS  
January 17, 2008